

OIPE

P.5

RAW SEQUENCE LISTING DATE: 10/18/2001  
 PATENT APPLICATION: US/09/964,899 TIME: 09:35:48

Input Set : A:\Seqlist.txt  
 Output Set: N:\CRF3\10182001\I964899.raw

ENTERED

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4 <110> APPLICANT: Cohen, Dalia et al.
7 <120> TITLE OF INVENTION: Identification of Genes Involved in
8     Alzheimer's Disease Using Drosophila Melanogaster
11 <130> FILE REFERENCE: 4-31612 A
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/964,899
C--> 13 <141> CURRENT FILING DATE: 2001-09-27
13 <150> PRIOR APPLICATION NUMBER: 60/236,893
14 <151> PRIOR FILING DATE: 2000-09-29
16 <150> PRIOR APPLICATION NUMBER: 60/298,309
17 <151> PRIOR FILING DATE: 2001-06-14
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24 <211> LENGTH: 123
25 <212> TYPE: DNA
26 <213> ORGANISM: Homo Sapien
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30 gcagaagatg tgggttcaaa caaagggtgca atcatggac tcatggtggg cggtgttgc      120
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34 <211> LENGTH: 129
35 <212> TYPE: DNA
36 <213> ORGANISM: Homo Sapien
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41 atagcgtag
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44 <211> LENGTH: 300
45 <212> TYPE: DNA
46 <213> ORGANISM: Homo Sapien
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50 gcagaagatg tgggttcaaa caaagggtgca atcatggac tcatggtggg cggtgttgc      120
51 atagcgacag tgatcgatcaccttggtg atgctgaaga agaaacagta cacatccatt      180
52 catcatggtg tggtgaggt tgacccgct gtcacccag aggagcgcca cctgtccaag      240
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56 <211> LENGTH: 300
57 <212> TYPE: DNA
58 <213> ORGANISM: Homo Sapien
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62 gcagaagatg tgggttcaaa caaagggtgca atcatggac tcatggtggg cggtgttgc      120
63 atagcgacag tgatcgatcaccttggtg atgctgaaga agaaacagta cacatccatt      180
64 catcatggtg tggtgaggt tgacccgct gtcacccag aggagcgcca cctgtccaag      240

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65 atgcagcaga acggctacga aaatccaacc tacaagttct ttgagcagat gcagaactag	300
67 <210> SEQ ID NO: 5	
68 <211> LENGTH: 72	
69 <212> TYPE: DNA	
70 <213> ORGANISM: Homo Sapien	
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74 acagtgcagg ca	72
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77 <211> LENGTH: 1537	
78 <212> TYPE: DNA	
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83 agggagagcc cccggccggc tgccagaaga tcccggcggg aggaagccca agtgtcactt	120
84 gaattccacc caaggagcgg gcgcctggga tcagagcgtc ctgttttagca ataacggctg	180
85 gacacgtcc tacaagttac gggagagtcg gctgtgaagg agacgttcgc ttatccccctg	240
86 tgtccccgtc cctggccccc ccagaccccc gccttgccct gcgcctggag gggagatcca	300
87 gaatgaaagg caagaaagg attgttgcag catotggcag tgagactgag gatgaggaca	360
88 gcatggacat tcccttggac ctttcttcat ccgctggctc aggcaagaga aggagaaggg	420
89 gcaacctacc caaggagtct gtgcagattc ttccggattt gctgttatgag caccgttaca	480
90 atccatatcc ttccagagcaa gaaaaagcgt tgctgtccca gcaaacacac ctgtctacgc	540
91 tacaggtctg taactgttc atcaacgccc gccgcaggct ctcctgtac atgttgagaa	600
92 agatggcaa agatccaaat cagttcacaa tttccgcgg tggggccaag atttctgaaa	660
93 cgagctctgt ggagtccgtg atggcatca aaaacttcat gccagctcta gaggagaccc	720
94 catttcattc ctgtacagct gggccaaacc caaccctagg gaggccactg tctccataagc	780
95 cgtcatcccc gggatcagtt ttggctcgtc catcagtgtatcc ctgcataacc actgtgactg	840
96 cattgaaaga tgtcccttgc tctctctgccc agtccggctgg tgtggacaaa aacacagata	900
97 tacagcagat agcggccaaa aacttcacag acacctctt catgtaccca gaggacactt	960
98 gtaaatctgg accaagtagc aatacacaga gtggctttt caacactcct cccctactc	1020
99 caccggacct caaccaggac ttcaagtggat ttcaagtctt agtggatgtt gcactcaaacc	1080
100 gggctgcaga gatggagctt caggccaaac ttacagctta acccattttc aagcaaaaca	1140
101 gttctcgaaa atgtcatgt tgccgggggtt aaggcaagag atgaattgca ttatttata	1200
102 tattttttat taatatttgc acatgggatt gctaaaacag cttctgtta ctgagatgtc	1260
103 ttcaatggaa tacagtcatt ccaagaacta taaaacttaaa gctactgttag aaacaaaggg	1320
104 ttttcttttt taaatgttgc ttggtagatt attcataatg tgagatgtt cccaatatca	1380
105 tgtgattttt ttttccctcc cttcccttt ttttggattt ttttcagact gtgcataact	1440
106 tagagaacct atagcatctt ctcattccca tgtggacag gatgcccaca tactgtctaa	1500
107 ttaataaaatt ttccatttt tttcaaaacaa gtatgaa	1537
109 <210> SEQ ID NO: 7	
110 <211> LENGTH: 332	
111 <212> TYPE: PRT	
112 <213> ORGANISM: Homo Sapien	
114 <400> SEQUENCE: 7	
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116 1 5 10 15	
117 Ile Thr Ala Gly Ala Arg Pro Thr Ser Tyr Gly Arg Val Gly Cys Glu	
118 20 25 30	
119 Gly Asp Val Arg Leu Ser Pro Val Ser Pro Leu Leu Ala Pro Pro Asp	

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Input Set : A:\Seqlist.txt

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120	35	40	45
121	Pro Arg Leu Ala Ser Arg Trp Glu Gly Arg Ser Arg Met Lys Gly Lys		
122	50	55	60
123	Lys Gly Ile Val Ala Ala Ser Gly Ser Glu Thr Glu Asp Glu Asp Ser		
124	65	70	75
125	80		
126	Met Asp Ile Pro Leu Asp Leu Ser Ser Ser Ala Gly Ser Gly Lys Arg		
127	85	90	95
128	Arg Arg Arg Gly Asn Leu Pro Lys Glu Ser Val Gln Ile Leu Arg Asp		
129	100	105	110
130	Trp Leu Tyr Glu His Arg Tyr Asn Ala Tyr Pro Ser Glu Gln Glu Lys		
131	115	120	125
132	Ala Leu Leu Ser Gln Gln Thr His Leu Ser Thr Leu Gln Val Cys Asn		
133	130	135	140
134	Trp Phe Ile Asn Ala Arg Arg Arg Leu Leu Pro Asp Met Leu Arg Lys		
135	145	150	155
136	160		
137	Asp Gly Lys Asp Pro Asn Gln Phe Thr Ile Ser Arg Arg Gly Ala Lys		
138	165	170	175
139	Ile Ser Glu Thr Ser Ser Val Glu Ser Val Met Gly Ile Lys Asn Phe		
140	180	185	190
141	Met Pro Ala Leu Glu Glu Thr Pro Phe His Ser Cys Thr Ala Gly Pro		
142	195	200	205
143	Asn Pro Thr Leu Gly Arg Pro Leu Ser Pro Lys Pro Ser Ser Pro Gly		
144	210	215	220
145	Ser Val Leu Ala Arg Pro Ser Val Ile Cys His Thr Thr Val Thr Ala		
146	225	230	235
147	240		
148	Leu Lys Asp Val Pro Phe Ser Leu Cys Gln Ser Val Gly Val Gly Gln		
149	245	250	255
150	Asn Thr Asp Ile Gln Gln Ile Ala Ala Lys Asn Phe Thr Asp Thr Ser		
151	260	265	270
152	Leu Met Tyr Pro Glu Asp Thr Cys Lys Ser Gly Pro Ser Thr Asn Thr		
153	275	280	285
154	Gln Ser Gly Leu Phe Asn Thr Pro Pro Pro Thr Pro Pro Asp Leu Asn		
155	290	295	300
156	Gln Asp Phe Ser Gly Phe Gln Leu Leu Val Asp Val Ala Leu Lys Arg		
157	305	310	315
158	320		
159	Ala Ala Glu Met Glu Leu Gln Ala Lys Leu Thr Ala		
160	325	330	
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162	<211> LENGTH: 1053		
163	<212> TYPE: DNA		
164	<213> ORGANISM: Homo Sapien		
165	<400> SEQUENCE: 8		
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167	agtgtgtgc gcaaccacac ttaccagatg ttgacactgc tggcagagga ccgtgcagtt	120	
168	ccctcggccc ccacaggccc tgggccccctg ctggagtttgc ctctgcacga ggatctgtcg	180	
169	accctgtgtgt tgacatggca gctgcaatgg gatgagcttg gggatggggt cgaggaacgg	240	
170	cgggctgagc aactgaaact atttgaatg ctatgtgagcg aagctcgcca gccactgttg	300	
	cggcatggtc cagttcgtga ggctctgctc accctgtgg atgcctgtgg cgcggctgtg	360	
	cccaagtagcc cagcactgga tgaaggcttg gtgctacttc tcagccagct gtgtgtttgt	420	

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Input Set : A:\Seqlist.txt  
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171 gtggcccaagg agccttcatt gtcgagttc ttccctgcagc caccctcctga gcctggagcc 480  
 172 gctccccgtc ttcttctt ttctcgccctt gtcccttttg tgcacatcgaga gggcacccctg 540  
 173 gcccagcagg cccgtatgc cctacttctt ctcatggctt tgtagctgg gagccccact 600  
 174 gtggcccgct acatcgccga taactcttac ttctgcccgg tgctggccac agggctcagt 660  
 175 gccctgtact catcaactgcc tcgaaaagatt gaggttccag gggatgattt gcactgtctg 720  
 176 cgacggaaag actggctggg agtgcagcc cttgcactct tcataatgttc cctggagttc 780  
 177 tgcaatgcag taattcagggt ggctcacccc ctggtgcaga acaagaccc tcataatgtt 840  
 178 cataatgggt tcctgggcc tgcataatggg cctgccttgc acaagaccc tcataatgtt 900  
 179 atgatcgcca gtaccgccta cctggaaactt ttccctacggta gatatacgaa gcctgcctt 960  
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 183 <210> SEQ ID NO: 9  
 184 <211> LENGTH: 351  
 185 <212> TYPE: PRT  
 186 <213> ORGANISM: Homo Sapien  
 188 <400> SEQUENCE: 9  
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 190 1 5 10 15  
 191 Ala Asp Asp Leu Ser Ala Val Arg Asn His Thr Tyr Gln Met Leu Thr  
 192 . 20 25 30  
 193 Leu Leu Ala Glu Asp Arg Ala Val Pro Ser Ala Pro Thr Gly Pro Gly  
 194 35 40 45  
 195 Pro Leu Leu Glu Phe Ala Leu His Glu Asp Leu Leu Thr Arg Val Leu  
 196 50 55 60  
 197 Thr Trp Gln Leu Gln Trp Asp Glu Leu Gly Asp Gly Val Glu Glu Arg  
 198 65 70 75 80  
 199 Arg Ala Glu Gln Leu Lys Leu Phe Glu Met Leu Val Ser Glu Ala Arg  
 200 85 90 95  
 201 Gln Pro Leu Leu Arg His Gly Pro Val Arg Glu Ala Leu Leu Thr Leu  
 202 . 100 105 110  
 203 Leu Asp Ala Cys Gly Arg Pro Val Pro Ser Ser Pro Ala Leu Asp Glu  
 204 115 120 125  
 205 Gly Leu Val Leu Leu Ser Gln Leu Cys Val Cys Val Ala Gln Glu  
 206 130 135 140  
 207 Pro Ser Leu Leu Glu Phe Phe Leu Gln Pro Pro Pro Glu Pro Gly Ala  
 208 145 150 155 160  
 209 Ala Pro Arg Leu Leu Phe Ser Arg Leu Val Pro Phe Val His Arg  
 210 165 170 175  
 211 Glu Gly Thr Leu Gly Gln Gln Ala Arg Asp Ala Leu Leu Leu Leu Met  
 212 180 185 190  
 213 Ala Leu Ser Ala Gly Ser Pro Thr Val Gly Arg Tyr Ile Ala Asp His  
 214 195 200 205  
 215 Ser Tyr Phe Cys Pro Val Leu Ala Thr Gly Leu Ser Ala Leu Tyr Ser  
 216 210 215 220  
 217 Ser Leu Pro Arg Lys Ile Glu Val Pro Gly Asp Asp Trp His Cys Leu  
 218 225 230 235 240  
 219 Arg Arg Glu Asp Trp Leu Gly Val Pro Ala Leu Ala Leu Phe Met Ser  
 220 245 250 255  
 221 Ser Leu Glu Phe Cys Asn Ala Val Ile Gln Val Ala His Pro Leu Val

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222	260	265	270
223	Gln Lys Gln Leu Val Asp Tyr Ile His Asn Gly Phe Leu Val Pro Val		
224	275	280	285
225	Met Gly Pro Ala Leu His Lys Thr Ser Val Glu Glu Met Ile Ala Ser		
226	290	295	300
227	Thr Ala Tyr Leu Glu Leu Phe Leu Arg Ser Ile Ser Glu Pro Ala Leu		
228	305	310	315
229	Leu Arg Thr Phe Leu Arg Phe Leu Leu Leu His Arg His Asp Thr His		
230	325	330	335
231	Thr Ile Leu Asp Thr Leu Val Ala Arg Ile Gly Ser Asn Ser Arg		
232	340	345	350
234	<210> SEQ ID NO: 10		
235	<211> LENGTH: 1425		
236	<212> TYPE: DNA		
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241	caccaccgct gtcgaaccc ctgctgctgc tgctgcctct gctaattgtg gagccttccg	120	
242	gggccacact gatccgcatac cctttcatc gagtccaacc tggacgcagg atctgaacc	180	
243	tactgagggg atggagagaa ccagcagac tcccaagtt gggggccca tccctgggg	240	
244	acaagccat cttcgtaacct ctctcgaact acaggatgt gcagtatttt gggaaatttg	300	
245	ggctggAACAC gcctccacaa aacttcaactg ttgccttga cactggctcc tccaatctct	360	
246	gggtcccgctc caggagatgc cacttcttca gtgtccctg ctggttacac caccgatttg	420	
247	atcccaaAGC ctctagctcc ttccaggcca atggacca gtttgccatt caatatggaa	480	
248	ctggcgggt agatggaatc ctgagcggg acaagctgac tattgggttga atcaagggtg	540	
249	catcagtgtat ttccgggag gtcctctggg agccacgct ggtttcgct ttggccatt	600	
250	ttgatggat attggcctc gttttccca ttctgtctgt ggaaggagtt cggcccccga	660	
251	tggatgtact ggtggagcag gggctattgg ataagctgt ctctccctt taccaaca	720	
252	gggaccctga agagcctgat ggaggagagc tggctctggg gggctcgac ccgcacact	780	
253	acatcccacc ctcacccctt gtgcagtc cggccccgc ctactggcag atccacatgg	840	
254	agcgtgtgaa ggtggccca gggctgactc tctgtgccaa gggctgtgt gcacatcctgg	900	
255	atacgggcac gtccctcatc acaggaccca ctgaggagat ccggccctg catcagcca	960	
256	ttggggaaat cccctgtctg gtcgggagt acatcatcct gtgcgcgaa atccaaAGC	1020	
257	tccctcgagt ctccctcctt ttggggggg tctgtttaa ctcacgccc catgattacg	1080	
258	tcatccagac tactcgaat ggcgtccgccc tctgtgtc cggtttccag gccctggatg	1140	
259	tccctccgccc tgcagggccc ttctggatcc tcggtagcgt ctcttgggg acgtatgtgg	1200	
260	ccgtcttoga cgcggggac atgaagagca ggcgggggtt gggctggcg cgcgtcgca	1260	
261	ctcgccggagc ggacctcgga tggggagaga ctgcgcaggc gcagttcccc ggtgacgcc	1320	
262	caagtgaagc gcatgcgcag cgggtggctcg cggaggtct gctacccagt aaaaatccac	1380	
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266	<211> LENGTH: 433		
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268	<213> ORGANISM: Homo Sapien		
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273	Pro Pro Leu Leu Gln Pro Leu Leu Leu Leu Pro Leu Leu Asn Val		
274	20 25 30		

→ Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/964,899

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Input Set : A:\Seqlist.txt  
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L:13 M:270 C: Current Application Number differs, Replaced Current Application No  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:1483 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31